USSN CPA
09/306,

Deleted Claim 4

Version Showing Changes

--4. Test kits for enabling BRCA1 gene testing comprising the primers pairs listed in Table 4 under "PRIMER SEQUENCES" column, mixed in about 20mM of Tris-HCl, 50mM KCl, 25pM of dNTP and 5% formamide. -

Clean Copy of Claim 4

-- 4. (Amended) Test kits for enabling BRCA1 gene testing comprising the primer pairs listed in Table 4 under "PRIMER SEQUENCES" column, mixed in about 20mM of Tris-HCl, 50mMKCl, 25pM of dNTP and 5% formamide.--

USSN CPA
09/306,333

Deleted Claim 10

~~--10. (Amended) A method for detecting mutations in BRA1 genes comprising providing PCR primers capable of amplifying the entire coding sequence of the BRCA1 genes; amplifying a test sample containing nucleotide sequences by long distance multiplex PCR with primers as listed in Table 2, producing a first set of amplification products; subjecting this first set of amplification products to short distance multiplex PCR to produce a second set of amplification products, using the primer pairs of Table 4 listed under the "PRIMER SEQUENCES" column with clamping and linking sequences listed under the "CLAMPING SEQUENCES" column of Table 4, for effecting this short distance PCR; and subjecting the second set of amplification products to two-dimensional gel electrophoresis to produce a characteristic spot pattern for a specific mutation in the BRCA1 gene.--~~

Version Showing Changes

--11. The method of claim 10 where non-detecting gels and buffer materials are used so as to enable combined mixtures of multiple groups of BRCA1 ~~and hMLH1~~ genes to be subjected to the electrophoresis together.--

Clean Version Claim 11

11. The method of claim 10 where non-detecting gels and buffer materials are used so as to enable combined mixtures of multiple groups of BRCA1 genes to be subjected to the electrophoresis together.--